4140 4272 cct 4138 CCT 4270 g ò

RESULT AF048976

AF048976 4063 bp mRNA ROD Rattus norvegicus synaptic ras GTPase-activating SynGAP mRNA, complete cds.
AF048976
AF048976.1 GI:2935447 LOCUS ACCESSION VERSION KEYWORDS

Norway rat. Rattus norvegicus Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia; ORGANISM SOURCE

Chen, H. J. and Kennedy, M.B. Identification and cloning of a novel 130 ras GTPase-activating domain from the rat Rattus REFERENCE AUTHORS TITLE

(bases 1 to 4063)

JOURNAL REFERENCE AUTHORS TITLE

(in) SOC. NEUROSCI. ABSTR.: 1466;(1997)

2 (bases 1 to 4063)

Chen, H. J., ROJAS-SOLO, M. and Kennedy, M.B.
A synaptic Ras GTPase-activating protein (p135 Cam kinase II JOURNAL REFERENCE AUTHORS TITLE

Unpublished

3 (bases 1 to 4063)
Chen, H.-J. and Kennedy, M.B.
Direct Submission
Submitted (17-FEB-1998) Division of Biology, Califorof Technology, 1200 E. California Blvd., MC 216-76, 91125, USA

JOURNAL

1. .4063 /organism="Rattus norvegicus" /strain="Sprague-Dawley" /db\_xref="taxon:10116" 122. .4003 source FEATURES

22. .4003 function="prominent

CaMKII;

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es putative PH terminal encodes ine residues, and stsynaptic rotein activate intrinsic ras GTPase activity"
/note="synaptic ras-GAP; N-terminal encodes I domain, C2 domain, and ras-GAP domain; C-term proline-rich region, stretch of 10 histidine t/SXV motif; enriched in the forebrain postsy density fraction" Ω /codon\_start=1 /product="synaptic ras GTPase-activating

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88 BASE COUNT ORIGIN

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27-MAR-protein

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Craniata; Vertebrata; Sclurognathi; Muridae

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360 481 tacagcatggaagccgccccgctgcgcccttccggccctcgcaaggcttcctgagccgg 422 361 g ò à

601 tttcgacagatcctgcttccgaagtgctgaccatgaccgggccggctgatgcag 82 421 542 g g ò

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ADDA SET TEXACT TO THE PROCESS AND THE CONTROL OF THE PROCESS AND THE PROC % (bases 1 to 4265)
Kim,J.H. and Huganir,R.L.
Direct Submission
Submitted (20-FEB-1998) Neuroscience, Johns Hopkins Medical
Institute, 725 N. Wolfe Street, PCTB 900, Baltimore, MD 21205, USA
On Sep 15, 2000 this sequence version replaced g1:3044054.
Location/Qualifiers PSD-95/SAP90 435 237 495 297 555 615 417 Gaps atcaaacgtacaaagtcacaaacccaaacttgaccggaccagcagctttcgacagatcctg 4 Length 4265; the Indels with associates 15; DB 74; Mismatches Score 3919; Pred. No. 0; SynGAP: a synaptic RasGAP that protein family Neuron 20 (4), 683-691 (1998) 98240917 ö 91.7%; llarity 99.5%; Conservative Similarity đ 936 Matches 3942; Query Match Local source COUNT JOURNAL MEDLINE REFERENCE AUTHORS 178 118 376 496 316 238 436 556 JOURNAL 298 COMMENT CDS TITLE BASE CC ORIGIN g d d ô ŏ ŏ õ complete Euteleostomi; 3480 3600 3180 3300 3360 3540 3660 3720 3901 3840 3900 3841 4021 3361 3421 3481 3541 3601 3661 3721 3781 3961 15-SEP-2000 -C mRNA, COM gaccacccgccatggctgagccgctgcctgaacccaagaagaggctgctcgacgctcag gcctgggtgtccaatatgcctcacctgtccgctgacatcgagagtgcacacattgagcgg gacteceagateaagageateattggeaggetgatgetggtggaggaggtgegeegg gaaccaagttatggtcctgcccgtccacggcaacagagcctcagcaaagagggcagcatt cagcattcccagactccatccacgctgaaccccacgatgccggcctcggagcggactgta cagtaccaagccgcctggagcagagcgagaagcgcttgaggcagcagtggagaag Rattus norvegicus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae ARUBULUS 4265 bp mRNA ROD ROD RALTUS norvegicus GTPase activating protein SynGAP-and Began Done L. S. family for fe GI:10140854 (4064 00) 1,140,11. Norway rat AF050183.2 Kim, I II.

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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
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Identification and cloning of a novel
ras GTPase-activating domain from the
TCTGGGGTGCTATCCCCATCCT 4078
                                                                                                                                                                  GI:2935447
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                                                                      seq_documentation_block:
LOCUS AF048976 4063
DEFINITION Rattus norvegicus
SynGAP mRNA, comp.
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ACCESSION

KEYWORDS

SOURCE

VERSION

REFERENCE AUTHORS TITLE

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TITLE

REFERENCE AUTHORS

JOURNAL

TITLE

FEATURES

JOURNAL

/function="prominent substrate for endogenous CaMKII; can activate intrinsic ras GTPase activity"
/note="synaptic ras-GAP; N-terminal encodes putative PH domain, C2 domain, and ras-GAP domain; C-terminal encodes proline-rich region, stretch of 10 histidine residues, and t/SXV motif; enriched in the forebrain postsynaptic density fraction" à a Institute sadena, CA inhibited /product\*"synaptic ras GTPase-activating protein pl35 SynGAP" Chen, H.-J. and Kennedy, M.B.
Direct Submission
Submitted (17-FEB-1998) Division of Biology, Californiof Technology, 1200 E. California Blvd., MC 216-76, Page 91125, USA (thr) SOC. NEUROSCI. ABSTR.: 1466; (1997)

2 (bases 1 to 4063)
Chen, H.-J., Rojas-Soto, M. and Kennedy, M.B.
A synaptic Ras GTPase-activating protein (p135 SynGAP) /organism="Rattus norvegicus"/strain="Sprague-Dawley"/db\_xref="taxon:10116" ocation/Qualifiers /codon\_start=1 Cam kinase Unpublished

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LOCUS
AB016962
ACCESSION
AB016962.1 GI:4417206
KEYWORDS
SynGAP-b1.
SOURCE
CRGANISM Rattus norvegicus
CRGANISM Rattus norvegicus
CRGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. Tata Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. Tata Suzuki, Shinshu University School of Medicine, Department of Neuroplasticity; 3-1-1 Asahi, Matsumoto, Nagano 390-8621, Japan (E-mail:suzukit@sch.md.shinshu-u.ac.jp, Tel:+81-263-37-2683, Fax:+81-263-37-2725)
On Mar 16, 1999 this sequence version replaced gi:4239945.
Sequence updated (09-Feb-1999).
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Direct Submission
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BASE COUNT ORIGIN 371 430 231 490 550 291 QQ ga Ş δ ô ò Euteleostomi; Murinae; containing postsynaptic inhibited 3929 3749 4028 3968 4088 4148 3989 4208 4109 3848 4327 4049 4267 Rattus norvegicus synaptic ras GTPase-activating protein p135 AF048976 3789 CGCCATGGCTGAGCCGCTGCCTGAACCCAAGAGGGCTGCTCGACGCTCAGCTCCTCAT tcccttaacgcctccttggggcacccatctgtcaaccccactgctccattccaggaggga Rattus.

1 (bases 1 to 4063)
Chen, H.-J. and Kennedy, M.B.
Identification and cloning of a novel 130 kd protein
ras GrPase-activating domain from the rat forebrain Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae SynG (in) SOC. NEUROSCI. ABSTR.: 1466;(1997)

2 (bases 1 to 4063)
Chen, H.-J., Rojas-Soto, M. and Kennedy, M.B.
A synaptic Ras GrPase-activating protein (p135 Cam kinase II 3 (bases 1 to 4063) Chen, H.-J. and Kennedy, M.B. Direct Submission Submitted (17-FER-1998) Division of of Technology, 1200 E. California Bl 4352 GI:2935447 rat. norvegicus Unpublished AF048976.1 Rattus Norway DEFINITION ORGANISM 4029 3870 3990 4268 ACCESSION VERSION KEYWORDS REFERENCE AUTHORS TITLE JOURNAL REFERENCE AUTHORS JOURNAL REFERENCE 3702 4209 4050 3750 3810 4089 TITLE RESULT

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/function="prominent substrate for endogenous CaMKII; can activate intrinsic ras GTPase activity"
/note="synaptic ras-GAP; N-terminal encodes putative PH domain, C2 domain, and ras-GAP domain; C-terminal encodes proline-rich region, stretch of 10 histidine residues, and t/SXV motif; enriched in the forebrain postsynaptic density fraction" p135 230 489 290 350 410 699 470 729 Gaps caacctggatgaagacbccattatcaagccagtacacagctccatcctgggccaggagtt gatectgectegetteegaagtgetgaecatgaeegggeeeggetgatgeagagetteaa /product="synaptic ras GTPase-activating protein Length 4063; 1; Indels DB 74; 7; Score 3680.4; Pred. No. 0; 0; Mismatches ö Ouery Match
Best Local Similarity
99.98;
Matches 3692; Conservative 0 .4003 Ø 610 670 411 q ò 3

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of Biology, California Institute Blvd., MC 216-76, Pasadena, CA

Location/Qualifiers
1, .4063
/organism="Ratius norvegious"
/ortain "George Dawloy"

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FEATURES

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RLHMSNRKLEEYERRLLSQEEQTSKILMQYQARLEQSEKRLRQQQVEKDSQIKSIIGS
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Suzuki,T.

Suzuki,T.

Submitssion

Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. Tats

Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. Tats

Suzuki, Shinshu University School of Medicine, Department of

Neuroplasticity; 3-1-1 Asahi, Matsumoto, Nagano 390-8621, Japan

(E-mail:suzukit@sch.md.shinshu-u.ac.jp, Tel:+81-263-37-2683,

Fax:+81-263-37-2725)

On Mar 16, 1999 this sequence version replaced gi:4239945.

Sequence updated (09-Feb-1999).

Location/Qualifiers
                              01-SEP-2000
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Rattus norvegicus
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Rattus norvegicus mRNA for synGAP-d, complete
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PGGGKDLFYVSRPPL
SSSVSNLAAVGDLLH
SVPAQQLRIPLSFQN
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/note="synaptic ras-GAP; N-terminal encodes putative PH domain, C2 domain, and ras-GAP domain; C-terminal encodes proline-rich region, stretch of 10 histidine residues, and t/Sxv motif; enriched in the forebrain postsynaptic density fraction"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LSTGVPKPPAASILHSHSYSDEFGPSGTDFTRQLSLQDNLQHMLSPPQITIGPQRPA
LSTGVPKPPAASILHSHSYSDEFGPSGTDFTRQLSLQDNLQHMLSPPQITIGPQRPA
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PAMAEPLPEPKKRLLDAQRGSFPPWVQQTRV*

1273 c 1177 g 733 t
                               Rattus norvegicus synaplic ras CTPase-activating protein plas
SynGAP mRNA, complete cds.
AF048976
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Direct Submission
Submitted (17-FEB-1998) Division of Biology, California Institute of Technology, 1200 E. California Blvd., MC 216-76, Pasadena, CA
                                                                                                                                                               Euteleostomi;
Murinae;
                                                                                                                                                                                                                                                         a novel 130 kd protein containing from the rat forebrain postsynaptic
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PLFHMAADGPGPPAGHGGSSGHGPPSSHHHHHHHHHHHRGGEPPGI
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A synaptic Ras GrPase-activating protein (pl35 Unpublished
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/strain="Sprague-Dawley"
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                                                                                                                                                                                                                      Chen, H.-J. and Kennedy, M.B. Identification and cloning of ras GTPase-activating domain
                  SERVA
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Rattus norvegicus
seq_documentation_block:
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91125, USA
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                                                                                                       s.....ProLeuLeu.....proThrAlaSerL
                                                                                                                                               ThrserSerPheArgGlnIleLeuProArgPheArgSerAlaAspHisAs
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                                                                                                                                        euSerAlaAlaAlaLeuProAlaAlaPheArgGlyAsnThrTrp
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BASE COUNT ORIC 97.

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GlnAsnLeuAla 	yPheMetAsnG1 	euTyrGlulleS 	Glyfyrileasp 	pGluValLeuPr 	euProArgLeuL 	GlnArgGlnPro 	lleuArgGlyPr [[[[[]]]]] GCTGCGCGGGCC	snSerSerlleA 	MetaspMetala 	oProProGlyGl 	laargserserP 	GluGinLysMet 	nGlyAspGlyPr 	laAlaValGlyA !!!!!!!!!!	LeuGlyLeuArg 	rSerilethral 	spGlyValProA [][][][][] argererece
laLysvallle 	AspPheLeuGl 	tGlnGlnPheL 	erserPheGlu [[[[]]]]] GCAGTTTTGAG	Alateuteutr 	steuGlyProt 	snProAsnIle 	GInProMetVa 	targaspleuas 	euAsnSerSer 	ProProProProProCCCCCCCCCCCCCCCCCCCCCCCC	gProProLeuA.	lethrGluProd	LeuAspLeuGl 	SerAsnLeuA  	euThrAlaAlaI 	lyserglyse                  sgagrggerc	yvalthrihra HIIIIIIII Tetenetaege
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erMetAspGluSerArgLeuAspArgValLysGluTyrGluGluGluIle
                                   CCACCTTCCTCCCATCACCACCACCACCACCATCACCATCACCGAGGGGG
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                                                                                                                                                           AGGACCICICIACAGGGGICCCIAAGCCCCCIGCGGCCTCCATCCTTCAC
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Suzuki, T.

SynGAP-d

L Published Only in DataBase (1999) In press

L Cation by the DataBase (1999) In press

Suzuki, T.

Direct Submission

AL Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. Tatsuo Suzuki, Shinshu University School of Medicine, Department of Neuroplasticity; 3-1-1 Asahi, Matsumoto, Nagano 390-8621, Japan (E-mail:suzukit@sch.md.shinshu-u.ac.jp, Tel:+81-263-37-2683, Fax:+81-263-37-2725)

On Mar 16, 1999 this sequence version replaced gi:4239945.

Sequence updated (09-Feb-1999).

Location/Qualifiers

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LOCUS
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AB016962
DEFINITION Rattus norvegicus mRNA for synGAP-d, complete cds.
ACCESSION
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AB016962
VERSION
AB016962
Rattus norvegicus (sub_species:Sprague Dawley) cDNA to mRNA.
SOURCE
ORGANISM Rattus norvegicus
Chordata; Craniata; Vertebrata; Euteleosi
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.

REFERENCE
1 (bases 1 to 4801)
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// function="prominent substrate for endogenous CaMKII; can relivate intrinder ran Greativity"
// function intrinder as GAP; Noterminal encodes domain, C2 domain, and ras GAP domain; Coterminal encodes proline-rich region, stretch of 10 histidine residues, and taxxv motif; enriched in the forebrain postsynaptic density fraction" /protein\_id="AAC08071.1" /db\_xref="GI:2935448" /translation="MgyAPFRIVRRPPMHRPOYVHSPYDRPGWNPRFCTISGNOLLML henethetlingenæmmpblabprvavrvenpenemmennsknys (bases 1 to 4063) Chen, H.-J. and Kennedy, M.B. Direct Submission Submitted (17-FEB-1998) Division of Biology, California Institute of Technology, 1200 E. California Blvd., MC 216-76, Pasadena, CA 91125, USA Ø Euteleostomi; containing postsynaptic SynGAP) inhibited 4215 3903 tecetta 3843 4274 4334 4155 क्षांच्या है। स्ट og th 4063 bp mRNA ROD 27-MAR-1998 icus synaptic ras GTPase-activating protein pl35 4036 ACGCCCAGTTCCGCAACACCCCAGACCACTAGCCCCACCAGCATCACAGACCTCCTTCCC (bases 1 to 4063)
Chen, H.-J. and Kennedy, M.B.
Identification and cloning of a novel 130 kd protein
ras GTPase-activating domain from the rat forebrain g Sciurognathi; Muridae; /product="synaptic ras Grease activating pr Rattus norvegicus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalla; Eutherla; Rodentla; Sciurognathi; Muridae (in) SOC. NEUROSCI. ABSTR.: 1466;(1997)
2 (bases 1 to 4063)
Chen, H.-J., Rojas-Soto, M. and Kennedy, M.B.
A synaptic Ras GrPase-activating protein (p135 Cam kinase II /organism="Rattus norvegicus/strain="Sprague-Dawley"/db\_xref="taxon:10116" Location/Qualifiers complete cds. Blart \* GI:2935447 3981 4352 AF048976 4063 Rattus norvegicus SynGAP mRNA, compl Unpublished AF048976.1 Norway rat AF048976 Rattus. density DEFINITION ORGANISM 4096 3784 REFERENCE AUTHORS 3904 3964 4335 JOURNAL REFERENCE AUTHORS FERENCE AUTHORS ACCESSION VERSION KEYWORDS JOURNAL JOURNAL AF048976 FEATURES TITLE TITLE RESULT

Length 4063; ő 16; Indels DB 74; Query Match
Best Local Similarity 99.6%; Pred. No. 0; Matches 3611; Conservative 0; Mismatches

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Direct Submission
Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. Tate
Suzuki, Shinshu University School of Medicine, Department of
Neuroplasticity; 3-1-1 Asahi, Matsumoto, Nagano 390-8621, Japan
(E-mail:suzukit@sch.md.shinshu-u.ac.jp, Tel:+81-263-37-2683,
Fax:+81-263-37-2725)
On Mar 16, 1999 this sequence version replaced gi:4239945.
Sequence updated (09-Feb-1999).
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Mammalia; Eutheria; Rodentia; Sciuroquathi; Muridae
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Chen, H. -J., Rojas-Soto, M. and Kennedy, M.B.

A synaptic Ras GTPase-activating protein (p135 SynGAP) inhibited by Unpublished
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/note="synaptic ras-GAP; N-terminal encodes putative PH domain, C2 domain, and ras-GAP domain; C-terminal encodes profilms rich centum, stretch of 10 histiding residues, and
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
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Chen, H.-J. and Kennedy, M.B.
Direct Submission
Submitted (17-FEH-1998) Division of Riology, California Institute
of Technology, 1200 E. California Blvd., MC 216-76, Pasadena, CA
91125, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen, H.-J. and Kennedy, M.B.
Identification and cloning of a novel 130 kd protein containing ras Grpase-activating domain from the rat forebrain postsynaptic
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Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. T
Suzuki, Shinshu University School of Medicine, Department of
Neuroplasticity; 3-1-1 Asahi, Matsumoto, Nagano 390-8621, Jap
(E-mail:suzukit@sch.md.shinshu-u.ac.jp, Tel:+81-263-37-2683,
Fax:+81-263-37-2725)
On Mar 16, 1999 this sequence version replaced gi:4239945.
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Rattus norvegicus (sub_species:Sprague Dawley) cDNA
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
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Indexing Officer: AGEBRU - ABEBA GEBRU

Team: OIPEBackFileIndexing

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Legal Date: 28-06-1999

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1	LET.	7
2	A	1
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Remarks:

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